REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested.

In the present application, claims 28-41, 47-55, 57, 58, 60, 61, 63, 64, 66, 67, 69, 70, 72, 73, 75, 76, 78, 79, 81, 82, 84-97, and 113-166 are pending. The remaining claims have been canceled by way of this amendment or the previous amendment. Claim 28 has been amended to recite that the oxygen-reduced valve metal oxide particles are oxygen-reduced niobium oxide particles and to recite the range set forth in claim 46 with respect to the flow rate. Various claims have been amended to adjust parameters, which are supported in the application as originally filed. The new claims 137-166 have the language of claim 134 or claim 135, but are dependent on various other claims. Accordingly no questions of new matter should arise and entry of the amendment is respectfully requested.

At page 2 of the Office Action, the Examiner rejects claims 104-106 under 35 U.S.C. §112, second paragraph, as indefinite for depending upon a canceled claim. For the following reasons, this rejection is respectfully traversed.

Claims 104-106 have been canceled. This rejection should be withdrawn.

Also, at page 2 of the Office Action, the Examiner rejects claims 28-36 under 35 U.S.C. §102(b) as being anticipated by Clarke (U.S. Patent No. 5,173,215). The Examiner asserts that Clarke teaches conductive titanium suboxide particles that meet the limitation of an "oxygen-reduced valve metal oxide" of claim 28. The Examiner further asserts that even though Clarke contains no teaching with regard to flow rate, the particles of Clarke must fall within a flow rate range of "below 270 mg/s" since it can be assumed that they must have some flow however small. For the following reasons, this rejection is respectfully traversed.

Claim 28 recites that the oxygen-reduced valve metal oxide is an oxygen-reduced niobium oxide, and that the particles have a flow rate of from about 20 mg/s to about 270 mg/s.

Clarke does not teach or suggest that the oxygen-reduced valve metal oxide can be any other oxide other than titanium oxide. The entire description of Clarke is directed towards titanium oxides.

Also, Clarke contains no discussion of flow rates. Clarke does not teach particles that have a flow rate of from about 20 mg/s and 270 mg/s. A teaching of particles with a flow rate in this range is completely absent from the teaching of Clarke. Therefore, this rejection should be withdrawn.

At page 3 of the Office Action, the Examiner rejects claims 28-36, 38-43, 45-46, 56-57, 59-60, 62-63, 65-66, 68-69, 71-72, 74-75, 77-78, 80-81, 83-84, 86-87, 89-90, 92-93, 95-96, 98-99, 101-102, 107-108, 110-111 under 35 U.S.C. §102(b) as anticipated by Fife et al. (International Publication No. WO 98/19811). The Examiner asserts that Fife et al. teaches agglomerations of flake and angular niobium powders. The Examiner further asserts that niobium metal is encompassed by the expression "oxygen-reduced valve metal oxide," because this expression does not exclude the complete reduction of the metal oxide to the metal. For the following reasons, this rejection is respectfully traversed.

The Examiner's assertion that "an oxygen-reduced metal oxide" encompasses niobium metal is incorrect. This expression expressly includes the limitation that the material is an oxide. An oxide "is a mineral in which metallic atoms are bonded to oxygen atoms." Hawley's Condensed Chemical Dictionary, eleventh edition, (1987). Niobium metal does not contain metallic atoms bonded to oxygen atoms. Therefore, niobium metal is not an oxide, and it is not encompassed by the expression "an oxygen-reduced valve metal oxide." For instance, claim 28 recites an oxygen-reduced metal oxide, which clearly means that the material is still an oxide. The meaning of this is

clearly provided in the present application at, for instance, pages 5 and 6. See especially page 6, lines 5-6, of the present application. Clearly, niobium metal is different from niobium oxide.

With respect to the Examiner's argument that the formula Nb_xO_y would cover niobium metal, the applicants respectfully disagree. First, these claims are directly or indirectly dependent on claim 28 or other claims that specifically recite the term "an oxygen-reduced valve metal oxide." By the very recitation of the term "oxygen-reduced valve metal oxide," the formula then recited in claims, such as claim 57, which is dependent on claim 28, must be characterizing the oxygen-reduced valve metal oxide. If the Examiner's interpretation of this formula is used, claim 57 would be covering niobium metal, which would be contradictory to claim 57 and claim 28, which specifically recite "an oxygen-reduced niobium oxide." Accordingly, based on the claims and the present specification, the Examiner's interpretation is incorrect and would contradict the claims.

Therefore, Fife et al. cannot anticipate the presently claimed invention, and this rejection should be withdrawn.

At page 5 of the Office Action, the Examiner rejects claims 28-37, 56-103, 107-125, and 136 under 35 U.S.C. §103(a) as unpatentable over Fife (International Publication No. WO 00/15555) in view of Fife et al. (International Publication No. WO 98/19811). The Examiner asserts that Fife ('555) discloses a reduced niobium oxide having a primary particle size of 1 micron or less. The Examiner concedes that Fife ('555) contains no teaching at all with regard to flow. However, again, the Examiner asserts that the particles of Fife ('555) must have some flow, however small, and that this would necessarily be in the range of "below 270 mg/s." With respect to claims 38-43, 45-46, 86-103, 107-125, and 136, the Examiner asserts that it is known in the art to agglomerate niobium powder as shown by Fife et al. ('811). The Examiner then asserts that it would have been obvious to one of skill in the art to modify the niobium agglomeration methods taught by Fife et al.

('811) to agglomerate oxygen reduced niobium powder. For the following reasons, this rejection is respectfully traversed.

The Fife ('555) application describes methods that at least partially reduce a niobium oxide. Fife ('555) mentions particle sizes that are 1 micron or less. However, Fife ('555) nowhere discusses flow rates, much less particles having a flow rate of between about 20 mg/s and 270 mg/s.

With regard to claims 38-43, 45-46, 86-103, 107-125, and 136, Fife et al. ('811) relates only to niobium metal and does not contain any discussion of niobium oxide particles. It is improper for the Examiner to combine two references that relate to two entirely different types of materials, here one a ceramic and the other a metal. Agglomerating niobium oxide is also not the same as agglomerating niobium metal. One skilled in the art would not take a teaching relating to niobium metal and apply it to a second teaching relating to niobium oxide particles. The two technologies are different and, clearly, there would be no motivation to combine these references except through the improper use of hindsight. Furthermore, since the materials are different, the properties associated with each material are not combinable. Furthermore, the comments set forth above with respect to Fife et al. (WO 98/19811) apply equally here in that Fife et al. does not relate to oxygen-reduced niobium oxides, but only relates to niobium metals. It is recognized that Fife does discuss the doping of niobium metal with oxygen, but as stated in Fife et al. (WO 98/19811), the material is still a niobium metal and does not discuss the formation of any niobium oxide. Thus, for these reasons, Fife et al. (WO 98/19811) is not related to the claimed invention.

The Fife and Fife et al. references also contain no teaching with regard to flow rate at all. For a §103 rejection to be proper, all of the claim limitations must be taught by the two references combined. Here a teaching with regard to flow rates is completely absent from both patents.

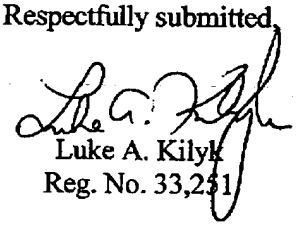
Therefore, all of the claim limitations are not taught by the two references, and this rejection should be withdrawn.

CONCLUSION

In view of the foregoing remarks, the applicant respectfully requests the reconsideration of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 03-0060. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



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